

Abstract

The invention relates to a coating comprising a getter metal alloy and to an arrangement and method for the production thereof. The coating therein consists of a non-vaporising getter metal alloy (2) for an inner wall (3) of a high-vacuum vessel (4). The getter metal alloy coating (1) therein is not encumbered with noble gas inclusions and comprises a metal alloy deposition product from a noble-gas-free getter metal alloy plasma 6. The arrangement basically consists of a metal plasma generator (7), which in turn comprises an insulator member (8), which carries an ignition electrode (9) and a cathode wire (10) comprising a getter metal alloy (2). Those three components are surrounded by a cage-like anode member (13), which together with the insulation member (8) projects into the high-vacuum vessel (5) to be coated and is supplied with cathode potential (12), high-voltage ignition pulse (19) and anode potential (14) by a voltage supply device (16), the anode member (13) together with the high-vacuum vessel (4) being held at ground potential. Preference is given to the coating, by means of that arrangement, of high-vacuum vessels (5) of beam guidance tubes of an ion beam acceleration system in order to produce ultra-high vacuums therein.